

RF Exposure Report

Report No.: SABCKS-WTW-P21010667

FCC ID: 2AAAS-CC06

Test Model: EG91-NAX

Received Date: Jan. 27, 2021

Test Date: Feb. 08, 2021

Issued Date: Feb. 20, 2021

Applicant: Vivint, Inc.

Address: 4931 N. 300 W. Provo, UT 84604 USA

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

| Issue No. | Description | Date Issued |
|----------------------|-------------------|---------------|
| SABCKS-WTW-P21010667 | Original release. | Feb. 20, 2021 |

1 Certificate of Conformity

Product: LTE Module

Brand: Vivint, Inc.

Test Model: EG91-NAX

Sample Status: Engineering sample

Applicant: Vivint, Inc.

Test Date: Feb. 08, 2021

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.3 -2002

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** Feb. 20, 2021
Vivian Huang / Specialist

Approved by : Clark Lin , **Date:** Feb. 20, 2021
Clark Lin / Technical Manager

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

| 2 Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm ²) | Average Time (minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| Limits For General Population / Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f ²)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | ... | ... | f/1500 | 30 |
| 1500-100,000 | ... | ... | 1.0 | 30 |

f = Frequency in MHz ; *Plane-wave equivalent power density

2.1 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.2 Classification

The antenna of this product, under normal use condition, is at least 20 cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.3 Antenna Gain

| For WWAN | | | | | | |
|-------------|------|----------|---------------------------|------------------------|--------------|--------------------|
| Antenna No. | Band | Model | Freq. Range | Antenna Net Gain (dBi) | Antenna Type | Connector Type |
| 1 | WNC | 48XKAB13 | Band 2 (1850-1910 MHz) | 1.38 | PIFA | none (like spring) |
| | | | Band 4 (1710-1755 MHz) | 1.57 | | |
| | | | Band 5 (824-849 MHz) | 0.26 | | |
| | | | Band 12 (699-716 MHz) | 0.14 | | |
| | | | Band 13 (777-787 MHz) | 0.57 | | |

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.4 Calculation Result

| Operation Mode | Evaluation Frequency (MHz) | Max. Conducted Power | | Directional Gain (dBi) | Distance (cm) | Power Density (mW/cm ²) | Limit (mW/cm ²) |
|----------------|----------------------------|----------------------|-------|------------------------|---------------|-------------------------------------|-----------------------------|
| | | (mW) | (dBm) | | | | |
| WCDMA B2 | 1850-1910 | 293.089 | 24.67 | 0.00 | 20 | 0.05831 | 1 |
| WCDMA B4 | 1710-1755 | 325.837 | 25.13 | 0.00 | 20 | 0.06482 | 1 |
| WCDMA B5 | 824-849 | 211.349 | 23.25 | 0.00 | 20 | 0.04205 | 0.54933 |
| LTE B2 | 1850-1910 | 380.198 | 25.80 | 0.00 | 20 | 0.07564 | 1 |
| LTE B4 | 1710-1755 | 381.066 | 25.81 | 0.00 | 20 | 0.07581 | 1 |
| LTE B5 | 824-849 | 169.824 | 22.30 | 0.00 | 20 | 0.03379 | 0.54933 |
| LTE B12 | 699-716 | 161.808 | 22.09 | 0.00 | 20 | 0.03219 | 0.46533 |
| LTE B13 | 777-787 | 159.588 | 22.03 | 0.00 | 20 | 0.03175 | 0.518 |

* Limit of Power Density = $f/1500$ (For frequency below 1500MHz)

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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